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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,724	07/15/2004	Ludwig Bar	2001P22564WOUS	4377

7590 01/23/2009
Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

AURORA, REENA

ART UNIT	PAPER NUMBER
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2862

MAIL DATE	DELIVERY MODE
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01/23/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/501,724	Applicant(s) BAR ET AL.	
	Examiner Reena Aurora	Art Unit 2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13, 15 - 17, 19, 21, 23 and 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13, 15 - 17, 19, 21, 23 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is in response to amendment received on 11/7/08.

Claims 13, 15 – 17, 19, 21, 23 and 31 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13, 15 – 17, 19, 21, 23 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hedengren et al. (5,389,876).

As to claims 13, 15 – 17, 19 and 21, Hedengren et al. (hereinafter Hedengren) discloses a flexible eddy current probe array comprising a flexible base (19, fig. 2c) comprising a front surface (surface away from the flexible rear layer 11) that comes in contact with a test body; a single signal coil (14); a single excitation coil (12); wherein the signal coil (14) and the excitation coil (12) are arranged in a planar form in a single layer on a rear surface of the flexible base (19); and a flexible rear layer (11) comprising a ferrite material that at least partially covers and contacts the signal coil (14) and the excitation coil (12) (col. 8, lines 51 - 66); wherein the flexible base (19), the signal coil (14), the excitation coil (12), and the flexible rear layer (11) are assembled in a flexible stack of layers that remains sufficiently flexible to allow the stack to be variably matched to radii of curvature on a surface of the test body (fig. 9, col. 12, lines 16 - 35).

Art Unit: 2862

Hedengren fails to show that the flexible base is a flexible sheet with a thickness of about 25 microns, the coils each have a thickness of about 17 microns, and the ferrite material extends over a thickness of about 200-600 microns. However, it is well known in that where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the dimensions of flexible base and flexible rear layer depending on the size of the device (Note MPEP 2144.04, IV, A).

As to claims 23 and 31, Hedengren et al. (hereinafter Hedengren) discloses a flexible eddy current probe array comprising a flexible base (19) formed as a flexible sheet of polyimide; a first electrical component (14) connected to the flexible base (19); a second electrical component (12) connected to the flexible base (19); and a rear layer (11) comprising a flexible curable material encapsulating ferrite particles (col. 8, lines 51 - 66), the rear layer attached to at least one of the electrical components (14, 12) on a curved surface of the rear layer (11) to match a curved surface of a test body; wherein the flexible base (19), the first (14) and second (12) electrical components, and the rear layer (11) collectively form an assembled stack that is flexible after curing of the curable material to variably conform to the curved surface of the test body (fig. 9, col. 12, lines 16 - 35). Hedengren fails to show that the flexible base is a flexible sheet with a thickness of about 25 microns, the coils each have a thickness of about 17 microns, and

Art Unit: 2862

the ferrite material extends over a thickness of about 200-600 microns. However, it is well known in that where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the dimensions of flexible base and flexible rear layer depending on the size of the device (Note MPEP 2144.04, IV, A).

Response to Arguments

Applicant's arguments filed on 11/7/08 have been fully considered but they are not persuasive. Applicant's argument that "the device of Hendengren et al. would perform differently as one of ordinary skill in the art of eddy current design would readily appreciate that the physical dimensions of the measurement device components, i.e. the layer thickness, the coil thicknesses and ferrite material thickness, define the operating characteristics of the probe, such as probe sensitivity and resolution". However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the dimensions of flexible base and flexible rear layer of Hedengren's device depending on the size of the measuring device (Note MPEP 2144.04, IV, A).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, P. Assouad can be reached on 571-272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2862

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Reena Aurora
/Reena Aurora/
Primary Examiner, Art Unit 2862